



G.K. Chemical Specialties Co. Inc.  
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# Material SAFETY DATA SHEET

**PRODUCT NAME: G-12 General Purpose Liquid Chlorine Disinfectant**

<b>HEALTH HAZARD RATING:</b>	MODERATE HAZARD – temporary or minor injury may occur.
<b>FLAMMABILITY HAZARD RATING:</b>	MINIMAL HAZARD – materials which are normally stable and will not burn unless heated
<b>REACTIVITY HAZARD RATING:</b>	SLIGHT HAZARD – materials which are normally stable, but can become unstable at high temperatures and pressures. These materials may react with water but will not release energy violently.
<b>PERSONAL PROTECTION:</b>	Safety glasses + Gloves
<b>HAZARD ALERT SIGN:</b>	HEALTH HAZARD – Hazardous FIRE HAZARD – Will not burn REACTIVITY – Unstable if heated SPECIFIC HAZARD – Corrosive

## SECTION I – MATERIAL IDENTIFICATION AND USE / IDENTIFICATION DE LA MATIÈRE ET USAGE

### MATERIAL NAME / IDENTIFIER – NOM / IDENTIFICATION DE LA MATIÈRE

G-12 General Purpose Liquid Chlorine Disinfectant

MANUFACTURER'S NAME AND ADDRESS/ NOM DU FABRICANT – ADRESSE EMERGENCY PHONE NO. / N° DE TÉLÉPHONE D'URGENCE	G.K. Chemical Specialties Co. Inc. 90 Barbados Blvd. Scarborough, Ontario M1J 1K9 (416) 261-7182 / 905 427-7605
SUPPLIER'S NAME AND ADDRESS/ NOM DU FOURNISSEUR - ADRESSE EMERGENCY PHONE NO. / N° DE TELEPHONE DURGENCE	
CHEMICAL NAME / DÉNOMINATION CHIMIQUE	Sodium hypochlorite
CHEMICAL FAMILY / FAMILLE CHIMIQUE	Not Applicable
CHEMICAL FORMULA / FORMULE CHIMIQUE	NaOCl
TRADE NAME AND SYNONYMS / APPELLATION COMMERCIALE ET SYNONYMES	Not Applicable
MOLECULAR WEIGHT / POIDS MOLÉCULAIRE	Not Applicable
MATERIAL USE / UTILISATION DE LA MATIÈRE	Cleaning Sanitizing

G.K. Chemical Specialties Co. Inc. has compiled the information and recommendations contained in this Material Safety Data Sheet from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the MSDS was prepared. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation.

G.K. Chemical Specialties Co. Inc. extends no warranty and assumes no responsibility as to the accuracy of the content or sufficiency of the information and expressly disclaims all liability for reliance thereon. This MSDS provides guidelines for the safe handling of this product. It does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required. Individuals exposed to this product should read and understand this information and be provided pertinent training prior to working with this product.

G.K. Chemical Specialties Co. Inc. assumes no responsibility for personal injury or property damage to vendors, users or third parties caused by the material. Such vendors or users assume all risks associated with the use of the material.

INGREDIENTS. This MSDS, under section of Ingredients, contains all ingredients listed under INGREDIENT DISCLOSURE LIST P.C. 1987-2719, 20/1/88 CANADA GAZETTE PART II VOL. 122, No 2 of HAZARDOUS PRODUCT ACT.

Percentage range of concentration of ingredients is expressed as percentage by weight of the total weight of the product. Ingredient List does not necessarily list all ingredients in the formulation and does not necessarily list all ingredient range of concentration, other than ingredients under the Disclosure List.

T.L.V. (units) or Threshold Limit Values refer to the limiting concentrations recommended by the Ministry of Labour. These values were adopted by the American Conference of Governmental Industrial Hygienists (A.C.G.I.H.). The figures refer to time-weighted average concentrations as P.P.M. (V/V) or mg/m<sup>3</sup> for a normal working day or at any time for some materials.

“C.A.S REG. No.” means the identification number assigned to a chemical substance by the Chemical Abstracts Service Division of the American Chemical Society.

“LC 50” means the concentration of a substance in air that when administered by means of inhalation over a specified length of time in an animal assay, is expected to cause the death of 50 per cent of a defined animal population.

“LD 50” means the single dose of a substance that, when administered by a defined route in an animal assay, is expected to cause death of 50 per cent of a defined animal population.

FLASH POINT. The minimum temperature at which a substance gives off flammable vapors which in contact with spark or flame will ignite.

**SECTION II – HAZARDOUS INGREDIENTS OF MATERIAL / INGRÉDIENTS DANGEREUX DE LA MATIÈRE**

HAZARDOUS INGREDIENTS / INGRÉDIENTS DANGEREUX	APPROXIMATE CONCENTRATION % CONCENTRATION APROXIMATIVE %	C.A.S., N.A. OR U.N. NUMBERS / NUMERO CAS NA OU CNU	LD50 {SPECIFY SPECIES & ROUTE} DL50 {PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION}	LC 50 {SPECIFY SPECIES & ROUTE} CL50 {PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION}
Sodium Hypochlorite	10 - 12	7681-52-9	LD50 Oral Rat 8910 mg/kgm	
Caustic Soda	0.1 – 0.5	1310-73-2	LD50 Oral Rat 500 mg/kgm (10% Sol'n)	

**SECTION III – PHYSICAL DATA FOR MATERIAL / CARACTÉRISTIQUES PHYSIQUES DE LA MATIÈRE**

PHYSICAL STATE / ÉTAT PHYSIQUE	Liquid
ODOUR AND APPEARANCE / ODEUR ET APPARENCE	Lime Yellow Liquid, Faint Hypochlorite Bleach Odour
ODOUR THRESHOLD (P.P.M.) / SEUIL DE L'ODEUR (PPM)	Not Applicable
SPECIFIC GRAVITY / DENSITE RELATIVE	1.10 ± 0.5 gm/cm <sup>3</sup>
VAPOUR PRESSURE [MM] / TENSION DE VAPEUR [MM]	< 25 at 20 °C
VAPOUR DENSITY [AIRE = 1] / DENSITE DE VAPEUR [AIR =1]	> 1
EVAPORATION RATE / TAUX D'ÉVAPORATION	~ Water
BOILING POINT [°C] / POINT D'ÉBULLITION [°C]	100 °C
FREEZING POINT [°C] / POINT DE CONGELATION [°C]	< -5 °C
SOLUBILITY IN WATER [20°C] / SOLUBILITÉ DANS L'EAU [20°C]	Infinite
% VOLATILE [BY VOLUME] / % VOLATILITÉ [PAR VOLUME]	80-90%
PH	12.8 ± 0.5
COEFFICIENT OF WATER / OIL DISTRIBUTION / COEFFICIENT DE RÉPARTITION EAU / HUILE	Not Applicable

**SECTION IV – FIRE AND EXPLOSION HAZARD OF MATERIAL/RISQUES D'INCENDIE ET D'EXPLOSION DU MATÉRIEL**

FLAMMABILITY / INFLAMMABILITÉ __ YES / OUI _X_ NO/NON IF YES, UNDER WHICH CONDITIONS? / SI OUI, DANS QUELLES CONDISIONS?	
MEANS OF EXTINCTION / MOYENS D'EXTINCTION	None Required
SPECIAL PROCEDURES / MARCHE A SUIVRE SPÉCIALE	Contact with fire or high heat this product may release some chlorine gas and containers may expand and crack due to expansion. Ventilate area and wear respiratory equipment. Flush product with water. Prevent released product from coming in contact with other chemicals. Use Class A, B, or C fire.



**MATERIAL NAME / IDENTIFIÉER - NOM / IDENTIFICATION DE LA MATIÉRE↓****G-12 General Purpose Liquid Chlorine Disinfectant**

<b>LD 50 OF MATERIAL [SPECIFY SPECIES &amp; ROUTE] / LD50 DE LA MATIÉRE [PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION]</b>	Rats, Oral 8100 mg/kgm
<b>LC50 OF MATERIAL [SPECIFY SPECIES &amp; ROUTE] LC50 DE LA MATIÉRE / [PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION]</b>	Not Established
<b>EXPOSURE [LIMITS] / LIMITS D'EXPOSITION</b>	TLV Not Available
<b>IRRITANCY OF MATERIAL/PROPRIÉTÉ IRRITANTE DE LA MATIÉRE</b>	Eyes, Skin
<b>SENSITIZATION OF MATERIAL / SENSIBILISATION A LA MATIÉRE</b>	Eyes, Skin
<b>SYNERGISTIC MATERIALS / MATÉRES SYNERGIQUES</b>	Contact with acids will produce chlorine gas
<b>CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY / CANCÉROGÉNÉCITÉ, EFFETS NOCIFS SUR LA REPRODUCTION, TÉRATOGÉNÉCITÉ, MUTAGÉNÉCITÉ</b>	Not regulated as carcinogen

**SECTION VII – PREVENTIVES MEASURES / MESURES PRÉVENTIVES****PERSONAL PROTECTIVE EQUIPMENT / MATÉRIEL PERSONNEL DE PROTECTION**

<b>GLOVES (SPECIFY) GANTS [PRÉCISER]</b>	Rubber Gloves
<b>EYE [SPECIFY] / YEUX [PRÉCISER]</b>	Glasses, Goggles
<b>RESPIRATORY (SPECIFY) / APPAREIL RESPIRATOIRE (PRÉCISÉR)</b>	Handling of some spills may require the use of approved respirator
<b>OTHER (SPECIFY) / AUTRES (PRCISER)</b>	Wear rubber boots when handling spills
<b>ENGINEERING CONTROLS [E.G. VENTILATION, ENCLOSED PROCESS, SPECIFY] / MÉCANISMES TECHNIQUES [EX. VENTILATION, OPÉRATION EN MILIEU FERMÉ, PRÉCISER]</b>	No special ventilation is required unless product is spilled or is exposed to decomposition conditions
<b>LEAK AND SPILL PROCEDURE / MESURES EN CAS DE FUITE OU DE DÉVERSEMENT</b>	Leaks: Quickly transfer product to another approved tank or container. Spills: Dilute spilled product with water. Then add sodium bisulfite (or sodium sulfate to neutralize product) and flush to sewer. Do not use combustible materials eg Sawdust to absorb product
<b>WASTE DISPOSAL / ÉLIMINATION DES RÉSIDUS</b>	For large quantities dispose according to local provincial and federal regulations. Small quantities flush with water to sanitary system.
<b>HANDLING PROCEDURES AND EQUIPMENTS / MÉTHODES ET ÉQUIPEMENT POUR LA MANUTENTION</b>	Avoid contact with eyes, skin; avoid breathing vapours.
<b>STORAGE REQUIREMENTS / EXIGENCES D'ENTREPOSAGE</b>	Store in closed containers in a cool place away from children, and direct heat or sunlight. Store away from acids, ammonia and organic materials.
<b>SPECIAL SHIPPING INFORMATION / RENSEIGNEMENTS SPÉCIAUX POUR L'EXPÉDITION</b>	Sodium hypochlorite class 8(9.2) PIN #1791 Packing Group III

## **SECTION VIII – FIRST AID MEASURES / PREMIERS SOINS**

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EYE CONTACT: Flush with water for 20 minutes get prompt medical attention

SKIN CONTACT: Flush skin with water for 15 minutes. If spilled on clothing, remove them and take a shower.

INHALATION: Remove to fresh air

IF SWALLOWED: Drink plenty of water or milk. Do not use baking soda or acidic antidote. Get prompt medical attention.

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ADDITIONAL INFORMATION /  
RENSEIGNEMENTS SUPPLÉMENTAIRES

## **SECTION IX – PREPARATION DATE OF M.S.D.S. / FICHE SIGNALÉTIQUE**

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TELEPHONE NO.: (416) 2617182

DATE: January 5, 2015

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**ADDITIONAL NOTES OR REFERENCES / NOTES ADDITIONNELLES OU RÉFÉRENCES:**